

An aerial photograph of a coastal town, likely in Japan, showing extensive flooding. The water has inundated the land, surrounding numerous houses and buildings. Many boats are visible in the flooded areas. The town is situated along a coastline with a sandy beach visible in the foreground. The image is used as a background for a presentation slide.

Protection from Flooding: The Community Rating System

**City Council
October 2, 2012**

Purpose of Presentation

- Addressing flooding is a major City initiative
- Past presentations have focused on structural responses to this issue
- This presentation will look at what City is doing and can do to improve its Community Rating System rating to assist homeowners in combating the impact of flooding
 - Every increase in rating represents another \$46 annual savings to households on average

Background

- Norfolk has long history of flooding

1933



1938



1962



Background

- Increased flooding events in recent years
 - Frequency
 - Severity
- Combination of soil subsidence and sea level rise



Background

- A national trend
 - More than 1,000 federally declared flood events over the past 50 years
 - 75% of federally declared disasters in the last 5 years

National Flood Insurance Program

- Federally subsidized flood insurance
 - Weighing steps to reduce federal exposure to flood insurance claims
 - Looking for localities to improve Community Rating by requiring more than minimum standards

Community Rating System

- Evaluation of actions by localities to reduce risk
- Incentives for localities to be proactive in planning, emergency preparedness, stormwater management
- Communities rated from Class 9 to Class 1
 - Norfolk currently rated CRS Class 9
 - 5% reduction in flood insurance premiums
 - Average savings per household of \$46 annually

Structural Activities

- Certification of Downtown floodwall
- Fugro studies
 - The Hague
 - Pretty Lake
 - City wide
- Wetland restoration

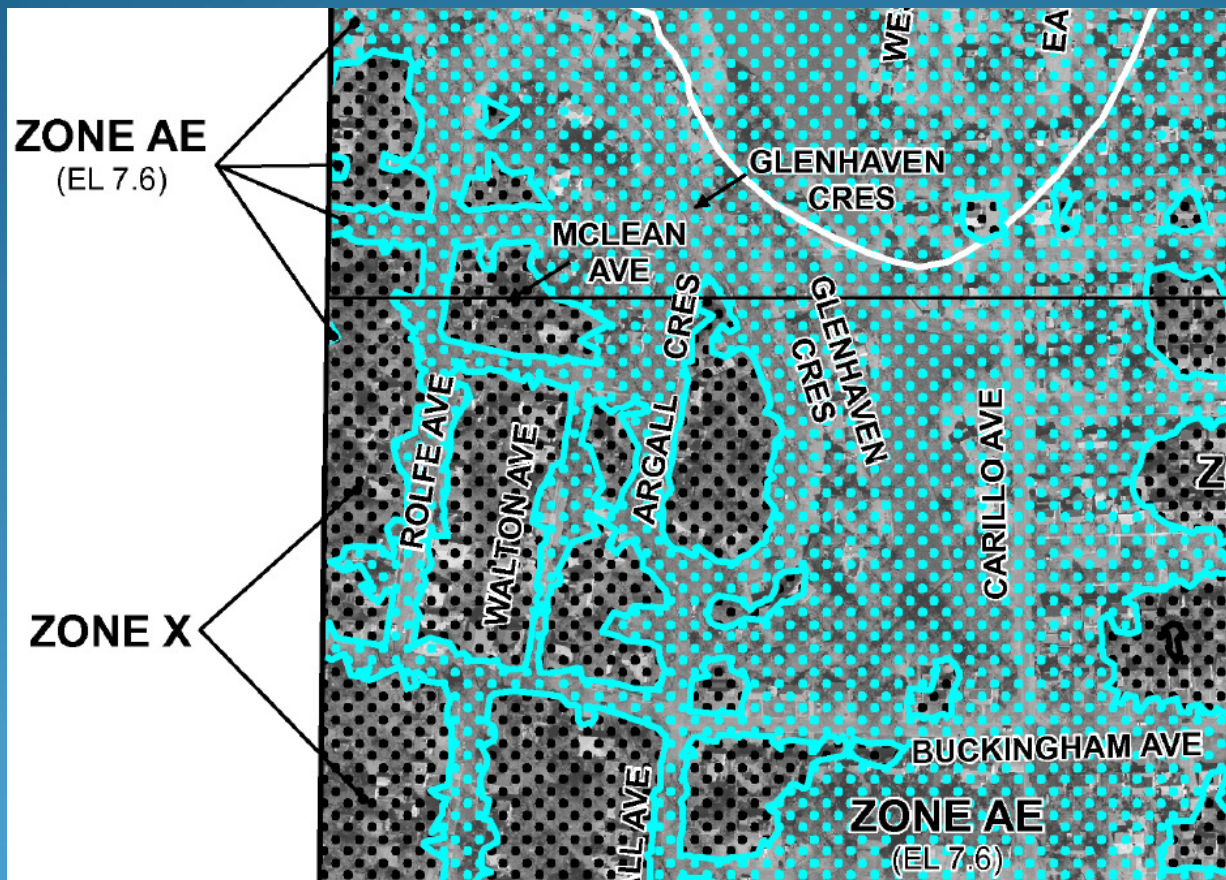


- **Work with IT to improve flood maps**



Procedural Activities - Complete

- Work with IT to improve flood maps



FEMA
Flood Map

Procedural Activities - Complete

- Work with IT to improve flood maps



City
Flood Map

Procedural Activities - Potential

- **Increase number of Certified Floodplain Managers**
 - Currently only two citywide
 - Arranged certification training in Norfolk this winter
- **Improve documentation of properties within Special Flood Hazard Areas**
 - Digitize all elevation certificates
 - Map elevation data provided

Procedural Activities - Potential

- Work with Emergency Preparedness, IT, Public Works to create warning and response system
 - Use technology to notify citizens of flooded areas
 - Flooding website
 - Reverse 911
 - Social media

Planning Activities - Complete

- Adopted Regional Hazard Mitigation Plan
- Public Works developing Stormwater Management Plan

Planning Activities - Potential

- **Develop Floodplain Management Plan**
 - Requires creation of Program for Public Information to guide public outreach
 - Requires creation of citizen and staff committee
 - City Public Information Officer must be a member

Regulatory Activities - Complete

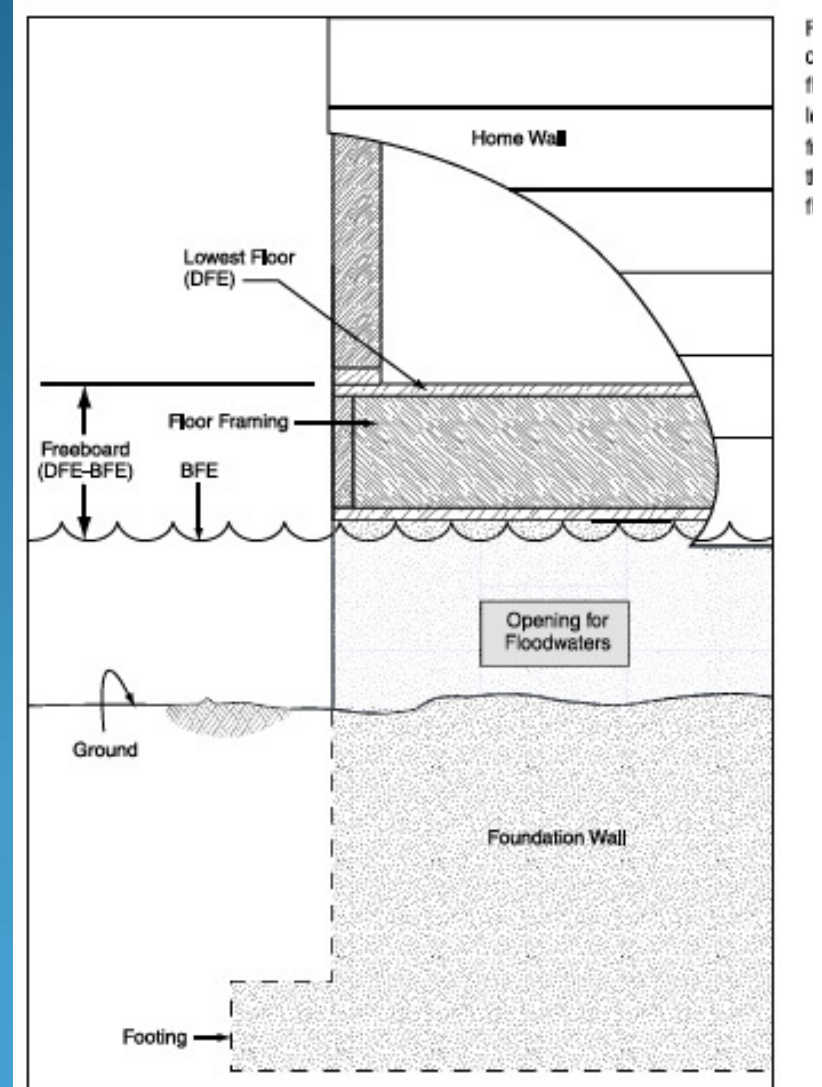
- **Current regulations meet minimum requirements**
 - Include adoption of the Flood Insurance Rate Maps
 - Require new construction within the AE and VE flood zones to meet heightened standards
 - Elevate/flood proof additions
 - Substantial improvements require entire structure be brought into compliance

Regulatory Activities - Potential

- **Eliminate ability to waive open space standards**
 - Recommended as part of Character District regulations
- **Develop Coastal Zone A regulations**
 - Will be mandatory by 2015
 - Primarily affects coastal areas

Regulatory Activities - Potential

- Increase finished floor elevation (Design Flood Elevation, DFE) by 1 foot
 - Would increase DFE from 1 foot to 2 feet above base flood elevation
 - Would reduce potential homeowner damages from flood events



Conclusion

- Norfolk considered a leader nationally in addressing flooding issues
- Can take additional actions to reduce exposure to flood events
- Request Council direction on pursuing initiatives

